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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/915,967  | 07/26/2001  | Dave Larson          | 4015-956            | 8294             |
| 24112   | 7590        | 08/05/2005           | EXAMINER            |                  |
| COATS & BENNETT, PLLC<br>P O BOX 5<br>RALEIGH, NC 27602 |             |                      | YANG, LINA          |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2665                |                  |

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/915,967             | LARSON ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Lina Yang              | 2665                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7/26/2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/15/2002</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because the following informalities.

Element 54 (specification page 12 line 17) is missing from fig. 3.

There is an inconsistency of numbering the demultiplexer in fig. 3:

it's been numbered 52 in the specification (page 10 line 21; and page 12 lines 15 and 17), but it's also been labeled 38 in fig. 3.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by White et al. (U.S. Patent No. 6,069,890).

Regarding claim 1, White clearly teaches a method of routing call data between two switching points (SSP 50 and SSP 52) (see fig. 2 or fig. 8 and corresponding descriptions. The following elements are reflecting the elements in fig. 2.), comprising:

receiving said call data (digitized speech) from a source switching point (SSP 50 in fig. 2) at an IP gateway (Internet Module 72) having at least one trunk circuit connecting said gateway to said source switching point (T1 trunks 76 ), said call data transferred on one of said trunk circuits (col. 7, lines 12-14) ;

packetizing said call data at said IP gateway to format said call data into one or more data packets suitable for transmission over an IP network (Internet 84) (col. 7 lines 15-17);

assigning an IP destination address to said packet data based on which said trunk circuit said call data was received by said IP gateway(col. 7 lines 17-18); and

transmitting said packets over an IP network to a destination switching point (SSP 52) (col. 7 lines 18-21).

Regarding claim 2, White further clearly teaches that:

receiving one or more data packets from an IP network (Internet 84) at an IP gateway (Internet Module 74) connected to a destination switching point (SSP 52) by at least one trunk circuit (T1/T3 trunks 88) (col. 7 lines 21-31);

assembling said call data from said received data packets (col. 7 lines 21-31);

directing said call data to one of said trunk circuits (T1 trunks 78) based on a source IP address associated with said data packets (col. 7 lines 21-31); and

transferring said call data to said destination switching point (SSP 52) (col. 7 lines 21-31).

Regarding claim 3, White further clearly teaches that at least one trunk circuit connecting said gateway (Internet Module 72) to said source switching point (SSP 50) comprises a plurality of trunk circuits (T1 trunks 76) connecting said gateway to said source switching point (col. 5 lines 24-26).

Regarding claim 4, White clearly teaches a method of routing call data between two switching points (SSP 50 and SSP 52) (see fig. 2 or fig. 8 and corresponding descriptions. The following elements are reflecting the elements in fig. 2.), comprising:

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receiving one or more data packets from an IP network (Internet 84) at an IP gateway (Internet Module 74) connected to a destination switching point (SSP 52) by at least one trunk circuit (T1/T3 trunks 88) (col. 7 lines 21-31);

assembling said call data from said received data packets (col. 7 lines 21-31);

directing said call data to one of said trunk circuits (T1 trunks 78) based on a source IP address associated with said data packets (col. 7 lines 21-31); and

transferring said call data to said destination switching point (SSP 52) (col. 7 lines 21-31).

Regarding claim 6, White further clearly teaches that the method further comprising:

receiving one or more data packets from said IP network (Internet 84) at an IP gateway (Internet Module 74) connected to a destination switching point (SSP 52) by at least one trunk circuit (T1/T3 trunks 88) (col. 7 lines 21-31);

assembling said call data from said data packets (col. 7 lines 21-31);

directing said call data to one of said trunk circuits (T1 trunks 78) based on an IP source address associated with said data packets (col. 7 lines 21-31); and

transmitting said call data from said IP gateway to said destination switching point (SSP 52) (col. 7 lines 21-31).

Regarding claim 7, White further clearly teaches that at least one trunk circuit connecting said source switching point (SSP 50) to said IP gateway (Internet Module 72) comprises a plurality of trunk circuits (T1 trunks 76) connecting the source switching point to said IP gateway (col. 5 lines 24-26).

Regarding claim 11, White clearly teaches that the IP gateway (Internet Module 72) having at least one trunk circuit connected to a switching point comprises a plurality of trunk circuits (T1 trunks 76) connected to said switching point (col. 5 lines 24-26).

Regarding claim 5, White clearly teaches a method of routing mobile communication system call data through an IP network (see fig. 2 or fig. 8 and corresponding descriptions. The following elements are reflecting the elements in fig. 2.), comprising:

transmitting call data from a switching point (SSP 50) to an IP gateway (Internet Module 72) on one of at least one trunk circuit connecting (T1 trunks 76) said switching point to said IP gateway (col. 7 lines 12-14) ;

packetizing said call data at said IP gateway to format said call data into one or more data packets suitable for transmission over an IP network (Internet 84) (col. 7 lines 15-17);

assigning an IP destination address to said data packets at said IP gateway based on which of said trunk circuits said call data was transferred from said switching point to said IP gateway (col. 7 lines 17-18);

assigning an IP source address to all said data packets, wherein said IP source address is associated with said IP gateway(col. 7 lines 17-18); and  
transmitting said data packets over an IP network (Internet 84) (col. 7 lines 18-21).

Regarding claim 8, White clearly teaches a method of routing mobile communications system call data through an IP network (Internet 84) (see fig. 2 or fig. 8 and corresponding descriptions. The following elements are reflecting the elements in fig. 2.), comprising:

receiving one or more data packets from said IP network at an IP gateway (Internet Module 74) connected to a destination switching point (SSP 52) by at least one trunk circuit (T1/T3 trunks 88);

assembling said call data from said data packets (col. 7 lines 21-31);

directing said call data to one of said trunk circuits based on an IP source address associated with said data packets (col. 7 lines 21-31); and

transmitting said call data from said IP gateway to said destination switching point (col. 7 lines 21-31).

Regarding claim 9, White clearly teaches an IP gateway to provide virtual trunks for routing call data between switching points (SSP 50 and SSP 52) (see fig. 2 or fig. 8



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and corresponding descriptions. The following elements are reflecting the elements in fig. 2, unless specified otherwise) in a mobile communications system, comprising:

at least one trunk circuit (T1 trunks 76 or 78) connected to a switching point in said mobile communications system, said at least one trunk circuit carrying said call data;

an IP interface connected to an IP network (T1/T3 trunks 86 or 88);

a data packetizer (packet assembler) to packetize call data received by said IP gateway on said trunk circuits into one or more data packets suitable for transmission over said IP network (col. 7 lines 15-17); and

an IP address generator (DHCP Server in fig. 3) to generate an IP destination address for said data packets based on which of said at least one trunk circuit said call data was received from said switching point by said IP gateway.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. (U.S. Patent No. 6,069,890) in view of Curry et al. (U.S. Patent No. 6,542,497 B1).

Regarding claim 10, in view of the above are rejected under 35 U.S.C. 102(b) as being anticipated by Nolting (U. S. Patent No. 6,282,267 B1). Rejection to claim 7, White further teaches that the IP gateway (Internet Module 72), further comprising: a data depacketizer (packet disassembler) to assemble data packets received from said IP network into mobile communications system call data (col. 7 lines 21-31).

White differs from the claimed invention in that White does not specifically teach that IP gateway comprising a demultiplexer directing said call data to one of said at least one trunk circuits based on an IP source address associated with said data packets.

However, Curry teaches that IP gateway (packet service gateway 69 in fig. 3B) comprising a demultiplexer (mux/Demux 102 in fig. 3B) directing said call data to one of said at least one trunk circuits based on an IP source address associated with said data packets (col. 14 lines 62-63 and 66-67; col. 15 lines 1-3). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include IP gateway comprising a demultiplexer directing said call data to one of said at least one trunk circuits based on an IP source address associated with said data packets as taught by Curry in the assembly of White in order to separate the incoming

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data into different output ports/different trunks which connected to different destination switching points.

Regarding claim 12, White clearly teaches an IP gateway to provide virtual trunks for routing call data between switching points (SSP 50 and SSP 52) (see fig. 2 or fig. 8 and corresponding descriptions. The following elements are reflecting the elements in fig. 2, unless specified otherwise) in a mobile communications system, comprising:

- at least one trunk circuit (T1 trunks 76 or 78) connected to a switching point in said mobile communications system, said at least one trunk circuit carrying said call data;

- an IP interface connected to an IP network (T1/T3 trunks 86 or 88);

- a data depacketizer (packet disassembler) to assemble data packets received from said IP network into mobile communications system call data (col. 7 lines 21-31).

White differs from the claimed invention in that White does not specifically teaches that IP gateway comprising a demultiplexer directing said call data to one of said at least one trunk circuits based on an IP source address associated with said data packets.

However, Curry teaches that IP gateway (packet service gateway 69 in fig. 3B) comprising a demultiplexer (mux/Demux 102 in fig. 3B) directing said call data to one of said at least one trunk circuits based on an IP source address associated with said data packets (col. 14 lines 62-63 and 66-67; col. 15 lines 1-3). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to

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include IP gateway comprising a demultiplexer directing said call data to one of said at least one trunk circuits based on an IP source address associated with said data packets as taught by Curry in the assembly of White in order to separate the incoming data into different output ports/different trunks which connected to different destination switching points.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pearce et al. (US 6,804,254 B1) teaches a system and method for maintaining a communication link that allow telephony features requiring the termination of media streaming between the participating telephony devices that are incompatible with such a termination.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151. The examiner can normally be reached on 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



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